

ROSS (J. F. W.)

With compliments of the Author.

An Inquiry into our Present
Knowledge of the Progress
of Myomatous Tumors.

BY

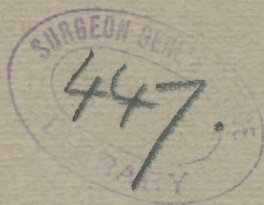
JAMES F. W. ROSS, M. D., C. M.,

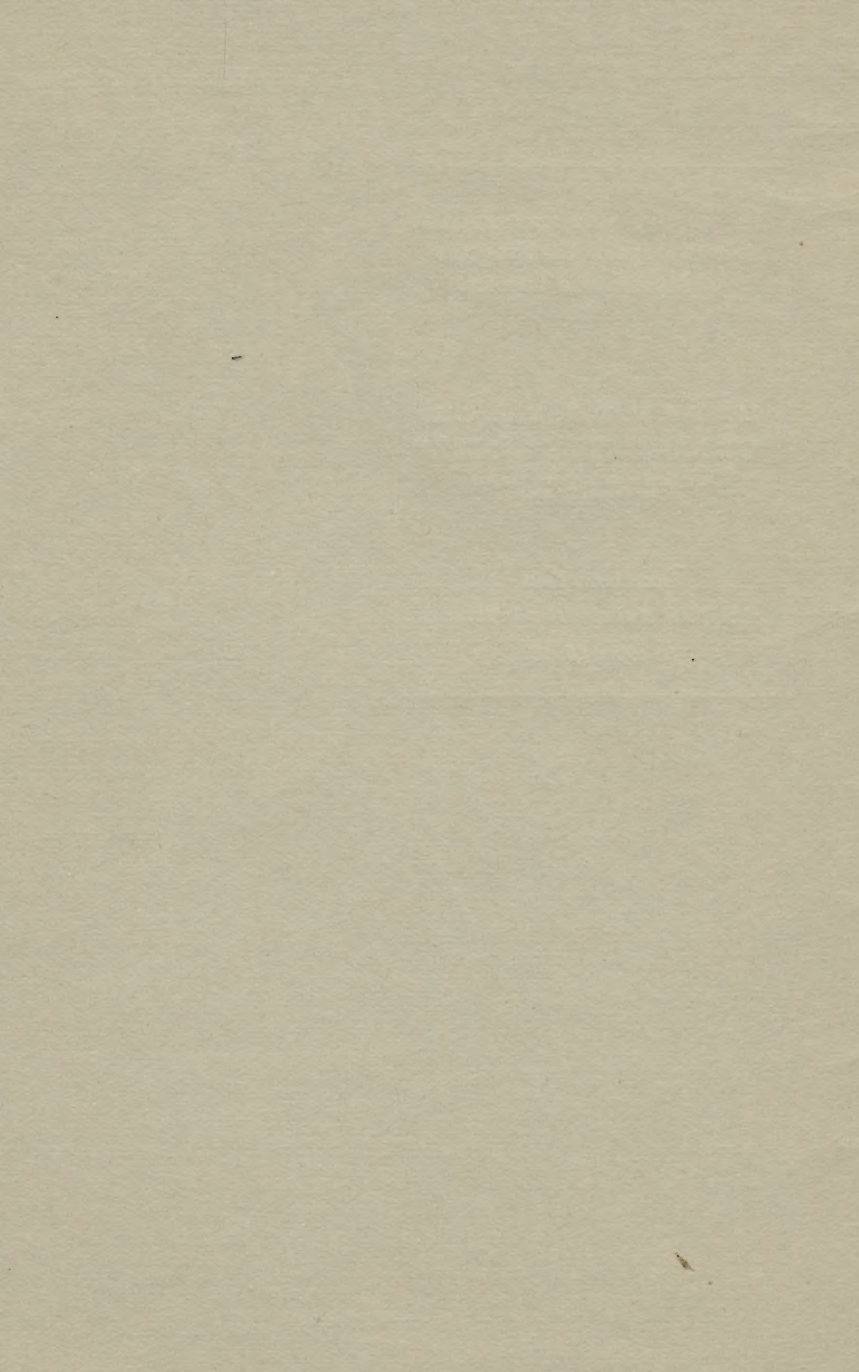
Lecturer on Abdominal Surgery, Toronto University; on
Gynaecology, Woman's Medical College, Toronto;
Gynaecologist to the Toronto General Hospi-
tal; Surgeon to St. John's Hospital
for Women, Toronto.

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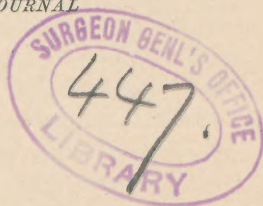
1. AFTER THE USE OF ELECTRICITY
2. AFTER REMOVAL OF THE OVARIES AND TUBES
3. AFTER THE OLD TREATMENT BY ERGOT, REST, ETC.

BY

JAMES F. W. ROSS, M. D., C. M.

LECTURER ON ABDOMINAL SURGERY, TORONTO UNIVERSITY;
ON GYNÆCOLOGY, WOMAN'S MEDICAL COLLEGE, TORONTO;
GYNÆCOLOGIST TO THE TORONTO GENERAL HOSPITAL;
SURGEON TO ST. JOHN'S HOSPITAL FOR WOMEN, TORONTO.

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AN INQUIRY INTO OUR PRESENT KNOWLEDGE OF THE PROGRESS OF MYOMATOUS TUMORS.*

BEFORE presenting to you anything medical, I wish to thank you for something that I think is general throughout your country—the cordial good-will of your profession toward your Canadian brethren. We in Canada may be small in many ways, but we are endeavoring to keep well to the front in the educational march of progress. The tendency, I am glad to say, has of late been toward a closer union of the medical profession of the two countries, and I trust this feeling will grow until every now and then your various medical associations may in the course of their yearly wanderings stray as far north as Toronto, Montreal, Quebec, or Halifax. I hope that then we may have a larger number of members of the special associations—of those, at any rate, endowed with continental ideas—living in our Canadian cities to welcome such associations should they visit us. In several of our cities we have well-equipped universities. To such as may be teachers in special departments it is of importance that they should be able to meet and converse yearly or oftener with those at work along the same lines of thought. Any reputable practitioner may become a fel-

* Read by invitation before the Medical Society of the State of New York at its eighty-fifth annual meeting.

low of the British Gynæcological Society, the London Obstetrical Society, or the Edinburgh Obstetrical Society. I believe that barriers to entrance into special societies should not be raised too high, because many young men may be unable to surmount them, and may yet be composed of excellent material that simply requires development. Every association will have its bore, its everlasting talker, but he is easily snuffed out. I thank you for the invitation extended to me by your worthy president. I hope that too much will not be expected from me, knowing, as I do, that my capability of dealing with this subject is far below that of many I see present. My intention is to be a gainer by the discussion, and this paper is simply intended to open the discussion. I am particularly anxious to hear the experience of many of the older practitioners who were brought into contact with myomata long before electrolysis or surgical procedures were carried out. During my twelve years since graduation I have seen many tumors diagnosticated as fibroid tumors that have proved to be of some other nature upon closer inspection after exploratory incision. I will mention a few cases brought under my notice to bring out many of the peculiarities of these tumors that are of importance in any investigation of the results of treatment. In some of these cases mistakes may have been made in the diagnosis. I can remember cases diagnosticated by me as some other form of tumor that proved to be myoma in its very worst form; these cases are narrated shortly to bring out some points to be discussed farther on.

1. A woman died of strangulated hernia while in the General Hospital. She had never had any symptoms pointing to womb trouble, as ascertained from her friends. At the post-mortem we found the uterus studded with multinodular myomata, the largest of about the size of a hen's egg.

2. A patient of my own. Medium-sized fibroid; very pro-

fuse menstruation. Pelvic pain, bladder symptoms. I gave ergot for a long time at intervals; she is able to work and in good health and is now past the menopause. Was under treatment for about four years. At times the hæmorrhage was profuse.

3. Case of patient lately seen. Had a fibroid several years ago; suppuration set in without any interference; had severe illness; no surgical treatment; now perfectly well and of normal size.

4. Patient of my own; multinodular fibroids. Removed appendages nine months ago; flooding as much as ever and suffering more pain with menstruation; tumors, three of them, pressing into the uterine cavity but not pedunculated, as found by dilatation of cervix and exploration by finger. One as large as a large goose egg, others somewhat smaller.

5. Multinodular fibroid. Removed appendages three months ago; not menstruated since. Has a great deal of pain from the right pedicle.

6. Multinodular fibroids. Pain; menorrhagia not very excessive; have been giving ergot for many months at intervals; is feeling well and able to do her work.

7. Case seen in consultation; large fibroid, making patient size of seventh month of pregnancy. Has carried the tumor, to her knowledge, for thirty years. I refused to operate, owing to her age; is able to go about and do her work. No hæmorrhage; has passed menopause. Was examined by a Dr. Widmer, one of our old practitioners long dead, who diagnosed the case as one of fibroid.

8. Case under my care a year ago. Profuse menorrhagia; refused operation. Medium-sized fibroid; is going on fairly well with ergot and rest each period.

9. Case seen in consultation. Advised operation to remove appendages. Patient refused, went west, and I heard from her physician that she died a few months after, from what he thought was suppuration of the tumor.

10. Case of a personal friend. Saw her in consultation. As large as a woman at the seventh or eighth month of pregnancy. Has always refused operation and is able to travel about and

enjoy life. She has had the noticeable enlargement for six or seven years.

11. Case occurring lately in my neighborhood and brought to my notice. Large fibroid suddenly born into vagina and removed with midwifery forceps. Previous menorrhagia and pain. Recovery from this, but death occurred soon after from peritonitis. This extrusion was set down to the wonderful effects of drugs taken—drugs that are known to be inert.

12. Case brought to my notice. Extrusion of fibroid while undergoing treatment by electricity. Case was said to indicate the wonderful powers of electricity.

13. Case of my own. Extrusion of a very large (about six pounds) myoma into vagina two months after enucleation of small one from the fundus of the uterus. Large one not large enough to be recognized at the time of first operation. Extrusion not due to any treatment, but simply occurring spontaneously. Too large for removal with midwifery forceps. Cut in pieces and delivered. Microscope showed œdematous myoma with no malignant elements. Quite well when last heard from.

14. Case of my own. Fibroid was diagnosticated twelve or thirteen years ago in England. Has had menorrhagia since, but no treatment. Consulted me owing to obstruction during coition. A myoma of about a pound and a half found in vagina and removed. Was well before removal and continues in good health.

15. Case of one of my *confrères*. Had electricity faithfully applied. Was reported as being quite relieved, but went to New York and had hysterectomy performed.

16. Operation done by one of my *confrères* at our hospital last month. She refused hysterectomy. Appendages were removed with the greatest difficulty. Died a few days after. Could have had hysterectomy done without difficulty, and, I believe, with less risk, owing to the difficulties with which ovaries were removed.

17. A case doing well with ergot.

18. Operation at which I assisted the other day. Large, œdematous myoma trying to get through the cervix; cervix

dilated by the tumor. No treatment up to this time; while waiting for hysterectomy, suppuration set in. Tumor was scooped out from below; is convalescing. (She made a good recovery.)

19. Case of fibroid. Abscess formed near it. I opened it in inguinal region. A fistula remains. Patient refuses further operation and is doing well, and has been for four or five months. Menorrhagia and some pain.

20. Case seen in consultation. Doing well with ergot and rest during menses.

Cases of Fibroid Tumors diagnosticated as other Tumors.

—This error has occurred many times. It is not necessary to detain you by relating such cases. The tumors have had the feeling of obscure fluctuation and have been taken for ovarian tumors. Within three weeks I have had two interesting cases of error. One was diagnosticated by me as ovarian multilocular with colloid contents, but proved to be a huge œdematous myoma, necessitating abdominal hysterectomy; the other was diagnosticated as a fibroid, and proved to be a large, smooth encephaloid mass, springing from behind the uterus. I have also been ready to do hysterectomy in a case where I found the main tumor ovarian, with colloid contents, and below it a fair-sized, soft, œdematous myoma, springing from the fundus uteri.

While with Mr. Lawson Tait I saw the following cases: Abdominal hysterectomy done for myoma fourteen times. Removal of appendages done for myoma twenty-nine times.

In looking over my records, accurately kept during that period, I find such remarks as these frequently appearing: "After opening the abdomen, Mr. Tait could not be sure of the nature of the case. After enlarging the incision up and down, he passed his hand behind the tumor, and then said: 'It is another horrid myoma.'" Those who have done hysterectomy for myoma can readily appreciate the difficulties of diagnosis in many cases even after the hand is in

the abdomen. I saw one case in which it required a good deal of courage to puncture what looked as much like a pregnant uterus as a myoma, but proved to be a myoma. I saw an impacted dermoid cyst removed from a lady who had consulted many of the most eminent specialists on this continent and in Europe, and who all diagnosticated the tumor to be a fibroid. She had been treated with electricity. To still further convince any who believe in their own ability to diagnosticate fibroid tumors of the uterus, I will give a list of the cases of mixed conditions found in the pelvis during my stay with Mr. Tait:

1. Myoma, with parovarian cyst.
2. Myoma, with ovarian cyst.
3. Myoma, with ovarian cyst.
4. Myoma, double pyosalpinx, and dermoid cyst.
5. Myoma and ovarian cyst.

I have seen two or three cases of solid ovarian tumors, a case of fibro-cystic tumor of the uterus, and a case of simple pregnancy—all taken to be myomata, and the correct diagnosis only made after opening the abdomen. In a case of unadmitted pregnancy in a young unmarried woman who came to me for the removal of a uterine tumor, after having her positive denial of the possibility of pregnancy given while anticipating the performance of a dangerous operation, I was so doubtful as to the nature of the case, in the absence of the positive symptoms of pregnancy, that I dilated the cervix to explore from below before proceeding with graver measures, and only completed the diagnosis by feeling the fœtal parts through the membranes. She did not abort, but went away to get advice from some one who would agree with her that she was not pregnant. Her tumor had all the feeling of an œdematous myoma. We, who are practically acquainted with the inside of the abdomen, can all agree as to the difficulties of diagnosis.

This brings me down to the most important part of the subject—the effects of treatment. The surgeon flies perhaps too readily to the knife, the electrician jumps at conclusions, and the general practitioner influences his patient according to his personal experience and according to the information he can gain by a close perusal of the very indefinite and contradictory records of the experience of others. Who can say that a case of fibroid would end fatally without operation, without electrical treatment, or without medicinal treatment? Who can positively assert that removal of the ovaries will be all-sufficient? Who can say that a cure is undoubtedly due to the two hundred or three hundred applications of electricity? Who can say that medicinal aids to rest in the control of hæmorrhage will not tide the patient over her menopause? And, lastly, who can say that the menopause will prove to be the goal sought for? I have seen a large myoma removed fourteen years after the removal of the ovaries, and I have seen several tumors grow long after the menopause. Many women menstruate after removal of the ovaries. Many women die from the operation of hysterectomy, and they die when no operation is done. Tumors may suppurate after electrolytic puncture, and they may suppurate when undergoing no treatment. But exceptions do not make rules, nor will one rule apply to all cases. We are too apt to become oversanguine as to one method of treatment. The methods of treatment now in vogue for the relief of the various symptoms accompanying uterine myomata have been before the profession long enough to allow of a classification of their various merits.

The surgical treatment has many points that recommend it to the operator and some points that do not recommend it to the patient. The great advantage it has over all other methods is the fact that it clears up the diagnosis. The

operation of abdominal hysterectomy is, I am convinced, done with unnecessary frequency. If we were all as particular in advising our patients against hysterectomy as the elder Keith was while in Edinburgh, the operation would not be undertaken so frequently. He sent them away several times and did not operate until they returned and entreated him to go on with surgical measures. His results were brilliant. But a curious thought strikes one—namely, what has happened to all of the patients who must have consulted him, owing to his reputation, from all parts of the world since he gave up the operation? I know of but one. She went to him two years ago; she is still increased in size, but able to live on without surgical interference. Electricity was used, with how much or how little benefit it is difficult for any one to accurately determine. I have quoted in my list three cases that have done equally well without any treatment, except ergot, rest, and occasional intra-uterine cauterization to relieve hæmorrhage, and two important factors—viz., time and patience. In medicine we frequently hear a drug recommended to relieve certain symptoms. One observer has, or believes he has, certain results; other observers make equally as critical observations and fail to obtain these results. It is so in what we find written about the uses of electricity in the treatment of myomata. One observer, a firm believer in the treatment, sends his cases out, and appends, after the history of the case, much improved or cured; another, who perhaps follows his cases further and who is prejudiced against the treatment, says none were improved; another takes an intermediate position, and says that hæmorrhage and pain were temporarily relieved in some cases and were not relieved in others. As to deaths, we have them with either of the three forms of treatment, and we have them where all treatment is refused. Some have been too ready to pick out the deaths due to the treatment by electricity. History repeats itself; the

profession criticised the operation of ovariectomy with equal severity only a few years ago, but the operation has survived. Every death from chloroform was made use of as an argument against its use. It was believed by some that it was criminal to operate without the steam spray. But we have outlived all that.

Surely the assertions of many honest workers in the field of labor now under discussion are not all vain imaginings. The great difficulty is to be sure that effects come from the causes to which they are ascribed. We all know that a myoma may be present and give rise to no symptoms; that it may cause some pain and no hæmorrhage; that it may cause pain and hæmorrhage; that it may cause hæmorrhage alone; that it may increase in size; increase as to the number of the nodules; increase rapidly by taking on the peculiar œdematous condition, whether single or multinodular; that it may become carcinomatous or calcareous; that it may suppurate; that it may grow after the menopause; that it may be extruded *per vaginam* after becoming pedunculated; that it may become separated from the uterus and become attached to some other abdominal organ; and, lastly, that it may, after increasing in size for several years, again diminish and almost totally disappear. From the many changes liable to occur during the progress of these tumors—changes so very dissimilar in their nature—it is quite possible for the adherents of the three schools of treatment to argue in favor of their several beliefs, and to present cases to support their arguments. Good results can be obtained from all the methods and each will have its share of failures. If one method fails we should try another. My reason for bringing this subject before you is the recent appearance of Mr. Tait's paper on removal of ovaries and tubes for myomata. There can be no doubt that he is right when he says that we can not properly compare the different methods unless the records of cases are

more accurately kept, with the name of the physician by whom the case was sent, the date, the result, and when the patient goes home; and her condition two, three, or four years after. Any one may read a paper and record cases as I have just done, but to make such statements thoroughly reliable, more information should be given. The information I have given in relating these cases has been too meager to make them of any value in a collection of statistics. And yet we have all seen dozens of cases recorded in this careless way, and on such meager facts we are asked to extol or condemn a certain form of treatment. In very many cases recorded I find the most important element wanting—the facts leading to the diagnosis and to its confirmation. Because a woman's uterus is three inches and a half long, with accompanying hæmorrhage and pain, we must not jump at the conclusion that she has an interstitial fibroid. Still I find such cases reported as fibroids, and reported as cured by electricity. In one list I find that in fifteen cases the current was passed six hundred and twenty-three times, or an average of forty-one sittings each. Taking an average of three sittings a month, the treatment would last about a year. Of these fifteen cases, five were reported cured. Of these five, no definite evidence of the presence of fibroid tumor is recorded in two. They may have been simple cases of subinvolution. The result is simply set down as a cure, and no subsequent record of the case is given. We have all seen the symptoms of myomata recur at irregular intervals after supposed cure. But yet I am a firm believer in the efficiency and in the danger of abdominal or vaginal galvano-puncture. Apostoli blames this and that so-called avoidable cause as the cause of death; but if it were not for this and that, we should all live forever. He makes a bare statement, in which there is no argument, that if certain things are done, he is assured the cures would be ninety-five out of a hundred. But this

is simply idle assertion. The electricians have been too prone to surround their statements with too much mysticism, and have attempted to annihilate those who have been unable to confirm their experience after a patient use of the remedy by saying that there has been a faulty application of the remedy. One would suppose that it required a personal visit to Paris, or many years of study, to qualify an expert gynæcologist to cauterize a uterus with an electrode or to perform galvano-puncture. I believe that there are more first-class batteries lying almost idle in the offices of gynæcologists and general practitioners to-day than there are batteries in use. Electricity, like every new remedy or every renewal of an old remedy, has been recklessly asserted by its supporters to be capable of curing all forms of uterine displacement, to remove pyosalpinx, cure catarrhal salpingitis (with the positive diagnosis of which I am not yet familiar), to haul taut the round ligaments, and all sorts of things that closer observers know it will not do. Such statements read well on paper. The magic powers ascribed to electricity read like the virtues found in the pamphlets of proprietary medicines. Now for some statistics.

	No.	Cured.	Arrest- ed.	Deaths.	Unaffected.
Nelson gives :					
Cases treated by ergot.	153	79	61	11	2
Cutter :					
Galvano-puncture. . .	50	11	25	4	7
Apostoli (with the bare assertion that if so and so, 95 out of 100 would be cured). . . .	403				
Cases of circumuterine inflammation.	10				
Tait :					
Removal of tubes } and ovaries. }	327	311		6	5 failures, 5 incomplete or unsatisfactory results.

Each operator of course endeavors, as he should do, to account for the failures. Tait thinks three out of his five failures were due to incomplete removal of the tubes. He believes that the operator and not the operation has had the five failures. He had also five cases in which the results were incomplete or unsatisfactory; two patients died, respectively, seven and eight weeks after recovery from the operation, from typhoid fever. One died from the extreme anæmic condition to which she had been reduced before operation. The other two of the five he says might be recorded as deaths due to operation. If so, this brings the deaths up from three to eight out of three hundred and twenty-seven cases. Two of these deaths occurred during one week while I was with him. I have each case recorded in my note-book. In one there was also present a small ovarian cyst. The second case was such a difficult one that it was only by pressing the ovaries up from the vagina that they could be removed. The tumor was a large œdematous myoma. A grave question in such cases is, When should oophorectomy give way to hysterectomy? In another case I saw him begin to do oophorectomy, but he was forced, by the excessive hæmorrhage, to finish by performing hysterectomy. No doubt the experience of some operators present will either coincide with or differ from that of Tait. I am not ready to form an independent opinion, and shall not be for a year or two. To perform the operation with a low mortality, two or three things are necessary. The cases with adhesions due to inflammation arising from injury, from galvanopuncture, or other cause, have an element of danger that is not present in simple cases. The cases in which the tumors have attained too great a size to permit of the easy removal of the tubes and ovaries also possess this increased element of danger. There is also danger in operating upon cases that have become profoundly anæmic. To do the operation

with the minimum of risk, it must be done early. To do it with the maximum of success, it must be done thoroughly. I believe that separate ligature of the vessels, if it could be carried out, would improve the operation, because two of my patients suffer from what I believe to be pain due to the constriction of nerve twigs in the pedicle. But this is only an idea, and may not be borne out by the experience of others. We must not expect that "pressure pain" will be immediately relieved, because the foreign body still remains behind in the pelvis. The electrician and the surgeon, before beginning treatment, are apt to say that the growth is growing fast. But how long do they wait to prove this to their own satisfaction? The patient's statement is usually accepted and treatment is begun or operation is done without delay. The measurements of abdominal tumors are peculiarly unreliable. I have examined cases and thought the growths increased in size one day and diminished a few days later. I have endeavored to watch the progress of myomata by frequent bimanual examinations, but have not yet reached that perfection of touch by means of which I could state positively any condition of change of size without drawing on my imagination. Plenty of imagination is required in dealing with the dark recesses of the pelvis, and this imagination must be largely used in the reports we see of the results of many gynæcological proceedings if our own experiences are worth anything. A look over the writings of various authors on this subject confirms this statement. One has implicit faith in bichloride of mercury for myomata; another says it is useless, but pins his faith to bromide of potassium. One recommends chloride of calcium while another condemns it. Another has implicit belief in the efficacy of Kreutznach water, while two others say they do not believe that it ever cured a single case of myoma. The consensus of opinion is that ergot is of undoubted use in

assisting in the expulsion of the tumor. In the cases I have recorded, both electricity and inert drugs were accorded the same potent properties; but the fact still remains that ergot is very useful. Barnes very wisely says of drugs what we may say of other procedures—"that conclusions are jumped at." These fallacies are due first to the slow growth of the tumor and the resulting difficulty in appreciating a change in the size. Second, to the fact that when they reach a certain size, many have no tendency to increase, even if no treatment is given. Third, to the fact that after the climacteric many remain inert or undergo retrogression, and also that many patients do not come for treatment until this period is approaching, and the supposed effects of treatment, continued, as it usually is, over a long period of time, may only be coincident with the natural processes of cure. My ideas of what the treatment of such cases should be are as follows: If the patient is not near the menopause, is suffering in her health, and is willing to submit to operation, take out her ovaries and tubes. If the diagnosis of the case is not clear and a pelvic mass is found simulating a myoma, urge operation for the double purpose of diagnosis and cure. If the patient will not submit to salpingo-oophorectomy, and has not an intra-uterine myoma that can be removed *per vaginam*, and is suffering from hæmorrhage, the interior of the uterus should be treated with hæmostatics. To this class belong the actual cautery and the positive electrode as well as the older remedies—alum, tannin, iodine, and iron. Ergot or cotton-root bark should be simultaneously administered to such patients. If there is an intra-uterine myoma causing the hæmorrhage, it should be removed from below if possible. If the tumor continues to grow, notwithstanding these procedures, and gives rise to—(1) uncontrollable hæmorrhage; (2) if it sloughs and gives rise to peritonitis and septic symptoms; (3) if it causes dangerous

pressure on pelvic or thoracic viscera—abdominal hysterectomy, or myomotomy, or enucleation from below should be performed. If the patient refuses to have this done, galvano-puncture may be resorted to. Keith originally treated some cases by simple puncture. Perhaps as many simple punctures as many of these cases have had of galvano-puncture would bring about a like result. It requires very little irritation to produce alterations in the nutrition of these growths, and cause suppuration or a retrogression. A simple opening of the abdomen has dissipated many tumors. But I believe that galvano-puncture is safer than simple puncture. I am a firm believer in the efficacy of galvano-puncture in many cases, but I do not believe, from what I can hear, read, and see, that either it or intra-uterine electrolysis will cure or relieve permanently anything like the number of cases accorded to them by their supporters, or be accompanied by the low death-rate claimed. Cutter had eight per cent. of deaths and fourteen per cent. unaffected cases after abdominal galvano-puncture. He had eleven cases cured. These were, I should judge, cases similar to those in which many would perform hysterectomy. After abdominal galvano-puncture and after many cases of vaginal galvano-puncture, hysterectomy becomes an almost impossible operation, owing to the presence of adhesions. The question then is, Should galvano-puncture be tried at all in cases that are willing to submit to hysterectomy? Price's statistics prove that the mortality of hysterectomy can be lowered. The statistics of galvano-puncture are as yet so unreliable or indefinite that the above question can not be satisfactorily answered. According to Cutter's statistics, a mortality of twenty-two per cent. for hysterectomy would give the preference to the removal of the tumor by the knife. In comparing the two procedures we should group the failures and the deaths of

galvano-puncture against the deaths of hysterectomy or myomotomy, because the latter operations, when not fatal, result in a permanent cure. Time will show that the failures and deaths from galvano-puncture are greater in number than a perusal of the present literature of the subject would lead us to believe, and as it has been with ovariectomy, so it will be with hysterectomy—the operation will be further improved and the death-rate lowered. Electricity is fast losing its fashionable favor, its clouds of mysticism have departed, and we are now in the clearer light able to gain a more accurate view of its real value in the treatment of myomata. The battery is following in the footsteps of the spray, but, like it, it will leave some good behind, though many of its vaunted powers prove to be illusions.

